

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Where claims have been amended, deletions are indicated by ~~strike-through~~, and additions are indicated by underlining:

In the claims

1. (Currently Amended) Apparatus for obtaining endoluminal access, the apparatus comprising:

an elongate body having a working axis and a distal region, the elongate body configured for insertion within a body lumen and comprising a plurality of links and at least one tensioning wire whereby said elongate body has a first, substantially flexible state and a second, substantially rigid state;

at least two working lumens extending through the elongate body;

at least one articulating element disposed near or at the distal region of the elongate body and pivotally connected to the elongate body near or at its distal region by a linkage member pivotally connected to a first hinge on the articulating element and a second hinge on the elongate body,

wherein the articulating element ~~is configured to articulate~~ articulates from an in-line position to an off-axis position relative to the working axis of the elongate body, and wherein a distal opening of at least one of the working lumens is substantially covered by the articulating element in the in-line position and is substantially uncovered by the articulating element in the off-axis position.

2. (Original) The apparatus of claim 1, wherein the articulating element comprises a visualization element configured to image within a body lumen.

3. -- 4. (Cancelled).

5. (Original) The apparatus of claim 1, wherein the articulating element further comprises at least two articulating elements.

6. (Original) The apparatus of claim 5, wherein the at least two articulating elements are configured for independent off-axis articulation.

7. (Original) The apparatus of claim 5, wherein the at least two articulating elements are configured for coordinated off-axis articulation.

8. (Previously Presented) The apparatus of claim 5, wherein the at least two articulating elements comprise at least two visualization elements configured to provide stereoscopic visualization.

9. (Original) The apparatus of claim 8, wherein a focal depth of the at least two visualization elements may be altered by altering a relative angle between the at least two visualization elements.

10-18. (Cancelled).

19. (Previously presented) The apparatus of claim 1 further comprising a visualization element and wherein off-axis articulation of the articulating element is configured to expose the visualization element.

20- 22. (Cancelled).

23. (Original) The apparatus of claim 1 further comprising a housing configured to couple the articulating element to the elongate body and to facilitate articulation of the articulating element.

24. (Previously Presented) The apparatus of claim 1 wherein the at least one articulating element is pivotally connected to the elongate body by a pair of pivoting linkage members, with each of the pair of linkage members being pivotally connected to a first hinge on the articulating element and a second hinge on the elongate body.

25. (Cancelled).

26. (Original) The apparatus of claim 1, wherein the elongate body is steerable.

27. (Original) The apparatus of claim 1, wherein the elongate body is rigidizable.

28. (Cancelled).

29. (Original) The apparatus of claim 1, wherein the articulating element further comprises a diagnostic or therapeutic tool.

30. (Original) The apparatus of claim 1 further comprising an atraumatic tip.

31. (Previously Presented) A method for obtaining endoluminal access, the method comprising:

advancing an elongate body having at least one articulatable element disposed near or at a distal region thereof into a body lumen;

moving the articulatable element from a position in-line with or adjacent to a working axis of the elongate body to a position out-of-line with the working axis, thereby at least substantially exposing a distal opening of a working lumen provided in the elongate body; and

passing a diagnostic or therapeutic tool through the working lumen while the articulatable element is maintained in the out-of-line position.

32. (Original) The method of claim 31, further comprising imaging within the body lumen with a visualization element disposed within or upon the articulatable element.

33. (Original) The method of claim 32, wherein imaging further comprises imaging stereoscopically.

34. -- 35. (Cancelled).

36. (Previously Presented) The method of claim 31 further comprising injecting or withdrawing a fluid through the working lumen.

37. (Previously presented) The method of claim 31, wherein articulating the articulatable element further comprises expanding the articulatable element from a reduced delivery configuration to an expanded deployed configuration, and with the articulatable element in a fixed position relative to the body when the articulatable element is in the expanded deployed configuration.

38. (Previously presented) The method of claim 31 further comprising repositioning the articulating element in-line with or adjacent to the working axis of the elongate body, at a position in front of the elongate body.

39. (Cancelled).

40. (Original) The method of claim 38 further comprising manipulating the elongate body and re-articulating the articulatable element out-of-line with the working axis.

41. (Original) The method of claim 33, further comprising altering a focal depth during stereoscopic imaging.

42. (Original) The method of claim 31 further comprising steering the elongate body within the body lumen.

43. (Original) The method of claim 31 further comprising rigidizing the elongate body within the body lumen.

44-64. (Cancelled)

65. (Currently Amended) Apparatus for obtaining endoluminal access, the apparatus comprising:

a substantially flexible elongate body having a working axis and a distal region, the elongate body configured for insertion within a body lumen;

at least two working lumens extending through the elongate body;

at least one articulating element disposed near or at the distal region of the elongate body and pivotally connected to the elongate body near or at its distal region by a linkage member pivotally connected to a first hinge on the articulating element and a second hinge on the elongate body,

wherein the at least one articulating element ~~is configured to articulate~~ articulates from an in-line position to an off-axis position relative to the working axis of the elongate body, and wherein a distal opening of at least one of the working lumens is substantially covered by the at least one articulating element in the in-line position and is substantially uncovered by the at least one articulating element in the off-axis position.

66. (Previously Presented) The apparatus of claim 65, wherein the at least one articulating element comprises a visualization element configured to image within a body lumen.

67. (Previously Presented) The apparatus of claim 65, wherein the at least one articulating element comprises at least two articulating elements.

68. (Previously Presented) The apparatus of claim 67, wherein the at least two articulating elements are configured for independent off-axis articulation.

69. (Previously Presented) The apparatus of claim 67, wherein the at least two articulating elements are configured for coordinated off-axis articulation.

70. (Previously Presented) The apparatus of claim 67, wherein the at least two articulating elements comprise at least two visualization elements configured to provide stereoscopic visualization.

71. (Previously presented) The apparatus of claim 70, wherein a focal depth of the at least two visualization elements may be altered by altering a relative angle between the at least two visualization elements.

72. (Previously presented) The apparatus of claim 65 further comprising a visualization element that is substantially covered by the at least one articulating element in the in-line position and is substantially uncovered by the at least one articulating element in the off-axis position

73. (Previously presented) The apparatus of claim 65 wherein the at least one articulating element is pivotally connected to the elongate body by a pair of pivoting linkage members, with each of the pair of linkage members being pivotally connected to a first hinge on the at least one articulating element and a second hinge on the elongate body.

74. (Previously presented) The apparatus of claim 65, wherein the elongate body is steerable.

75. (Previously presented) The apparatus of claim 65, wherein the elongate body is rigidizable.

76. (Previously presented) The apparatus of claim 65, wherein the at least one articulating element further comprises a diagnostic or therapeutic tool.

77. (Previously presented) The apparatus of claim 65 further comprising an atraumatic tip.